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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,076	09/09/2004	Kenichiro Shinoi	L9289.04152	4426

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STEVENS DAVIS MILLER & MOSHER, LLP
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WASHINGTON, DC 20036

EXAMINER

WENDELL, ANDREW

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/507,076	Applicant(s) SHINOI ET AL.	
	Examiner Andrew Wendell	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/05/2006 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US Pat# 6,246,732) in view of Webb (US Pat# 5,483,557).

Regarding claim 24, Kobayashi et al. demodulator including adaptive equalizer teaches a selector that selects one of equalization processing 34a (Fig. 9) and a second reception as processing 34b (Fig. 9) for a received signal 40 (Fig. 9) according to channel quality 31-32 and 110-112 (Fig. 9), a first receiver performs equalization 33 (Fig. 9) processing of the received signal if selector 34 (Fig. 9) selects the equalization

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processing (Col. 11 lines 43-47), and a second receiver 34b (Fig. 9) performing demodulation of the received signal if selected. Kobayashi et al. fails to teach the second receiver performing RAKE reception.

Webb's channel equalization in particular for fading channels teaches wherein the first receiver performs equalization 24 (Fig. 2) processing of the received signal if selected SW2 (Fig. 2), and a second receiver performs RAKE reception 25 (Fig. 2 and Col. 4 lines 18-27) of the received signal if the selector selects the RAKE reception SW2 (Fig. 2).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate the second receiver performing RAKE reception as taught by Webb into Kobayashi et al.'s receiver in order to have a more efficient receiver (Col. 2 lines 16-23).

Regarding claim 25, the combination including Webb teaches wherein the selector selects one of the first receiver and the second receiver based on one of a modulation scheme (Col. 2 lines 27-38 and Col. 4 lines 1-47).

Regarding claim 26, the combination including Kobayashi et al. teaches wherein the selector selects the first receiver when a moving speed of a station that communicated the received signal is detected as being below a predetermined speed level (Col. 6 line 45-Col. 7 line 8 and Col. 8 line 38-54).

Regarding claim 27, method claim 24 is rejected for the same reason as apparatus claim 18 since the recited elements would perform the claimed steps.

Regarding claim 28, method claim 25 is rejected for the same reason as apparatus claim 19 since the recited elements would perform the claimed steps.

Regarding claim 29, method claim 26 is rejected for the same reason as apparatus claim 20 since the recited elements would perform the claimed steps.

Response to Arguments

Applicant's Remarks	Examiner's Response
"Kobayashi does not disclose selecting between two kinds of reception-processing receivers as proposed in the Final Rejection."	Kobayashi clearly teaches two different reception receivers. The first receiver is receiving elements 41, 42, and 33 of figure 9 when the switch 34 selects equalization 34a (Fig. 9). The second receiver consist of receiving elements of 41 and 42 when the switch 34 selects normal reception 34b (Fig. 9).
"Therefore, combining the teachings of Webb with those of Kobayashi to modify Kobayashi's device in the manner proposed in the Final Rejection would have the effect of substituting Webb's RAKE receiver 25 for Kobayashi's adaptive equalizer 33."	3. In response to applicant's argument that both Webb and Kobayashi teaches the RAKE and equalization processing is selected when there is low channel quality, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed

	<p>invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See <i>In re Keller</i>, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In Webb the section stated by applicant (Col. 4 lines 23-33) that teaches the RAKE reception channel is selected when channel quality is poor does not support applicant's reason. Regardless by stating that both Webb and Kobayashi teaches the RAKE and equalization processing is selected when there is low channel quality is too broad of a statement since both inventions will have different thresholds. Examiner believes Webb and Kobayashi are combinable together because they are both communication receivers that selects between two different receivers based on some quality characteristic.</p>
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"Thus, simply substituting Webb's RAKE receiver for Kobayashi's equalizer, as proposed in the Final Rejection, would not provide the ability to disable the unselected reception processing, so that power consumption may be reduced as with Applicants' claimed device."	Examiner believes applicant is reading more into their claims than present. In the claim limitations there is no mention of power reducing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

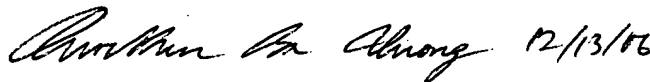
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrew Wendell
Examiner
Art Unit 2618

12/12/2006



QUOCHIEN B. VUONG
PRIMARY EXAMINER